News from Representative Randy Hultgren



HOME ABOUT RANDY SERVING YOU NEWSROOM OUR DISTRICT CONTACT







#### Dear Friend,

These past few weeks have been busy on the science front! From my work on the Science, Space and Technology Committee investigating sexual misconduct, to traveling the district with my high school student STEM Scholars, to talking space exploration with Bill Nye and more, please read on for the latest science update.

## STEM Scholars Team up with Law Enforcement and Manufacturers

It's been a busy year with my STEM Scholars, high school students advocating for and learning about STEM education and career opportunities in their communities and beyond. Recently, we visited the Kendall County Sheriff's and Coroner's Offices in Yorkville, and UniCarriers Americas Corporation in Marengo which manufactures a complete line of forklifts including the Nissan Forklift.

At the Sheriff's and Coroner's Offices, the STEM Scholars learned how science, technology, engineering and math play important roles in law enforcement investigations and forensic activities. Due to the lapse in government funding and votes in Washington, I was unable to make this meeting. But to the students and my staff who attended, it was like a real-life CSI episode!

Splitting into three groups, they worked alongside Detective Jason Flanders, Detective Michael DiSera and Coroner Jacquie Purcell.

### They learned:

 How to dust and lift fingerprints (including their own) from a variety of surfaces.

- How evidence technicians use the Cyanoacrylate fuming method to extract finger prints.
- How blood spatter patterns help investigators identify the type of crime committed.
- How to test substances for the presence of blood (using unknown and synthetic blood samples).
- Why someone would be autopsied and how the process occurs, including drawing toxicology samples.



(STEM Scholars visit Kendall County Sheriff's and Coroner's Offices)



(STEM Scholars engage in hands-on activities at Sheriff's Office)



(STEM Scholars test for fingerprints)



(STEM Scholars test for fingerprints)



(STEM Scholars learn about autopsies at Kendall County morgue)



(STEM Scholars visit Kendall County morgue)

At UniCarriers Americas Corporation, the STEM Scholars and I saw firsthand how this local manufacturer makes and customizes forklifts for their customers. During the visit we saw how UniCarriers involved the customer in the initial design process, incorporated changes to the engineering/CAD drawings, produced the forklifts and practiced quality control along the process.



(Rep. Hultgren and STEM Scholars visit UniCarriers in Marengo;

### photos courtesy UniCarriers)



(STEM Scholars grab a quick bite to eat in the UniCarriers conference room)



(Rep. Hultgren and STEM Scholars tour production floor)



(Rep. Hultgren and STEM Scholars tour production floor)



(STEM Scholars tour production floor)



(Rep. Hultgren addresses students, UniCarriers staff)

As reported in the Northwest Herald: "Students were able to get a behind-the-scenes look at the operation Saturday, and parents were able to find out more about the company and what future careers could exist for their children as well....Many parents said they got their kids involved in the program because it is a rare opportunity to dig deeper into STEM education." Click <a href="here">here</a> to read the Northwest Herald story on our visit.

## STEM Scholars Question Experts on Mentorships and Training

I was privileged to let my STEM Scholars ask the questions at a Science, Space and Technology Committee hearing entitled, "Mentoring, Training, and Apprenticeships for STEM Education and Careers." Here's what they wanted to know:

 Ekien at Oswego High School stressed the importance of hands-on learning and internships, acknowledging the difficulty in finding these opportunities. He asked: How can we measure the success of this kind of career exposure at a younger age, and how can we improve the relationship between businesses and schools to develop these opportunities?  Taylor at Harvest Christian Academy asked an academic: How willing are you take on a mentee and how many are you able to work with? Have you turned anyone down? How valuable are these experiences to you as a mentor?

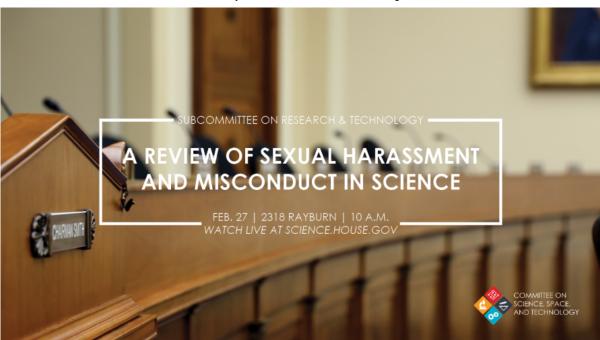
I followed up with further written questions for our witnesses from other STEM Scholars, and hope to have answers soon.

Click the picture below to watch how the witnesses responded:



(Click picture to watch video)

# Sexual Harassment has No Place Anywhere—including Science



Sexual harassment is unacceptable in any workplace, including Congress, which is why I was proud to support bipartisan work to reform the sexual harassment rules within the legislative branch. Click here to learn about our legislation.

Last month, the Committee continued our work with a hearing entitled, "A Review of Sexual Harassment and Misconduct in Science." I participated to help ensure that federal agencies are following the law and proper protocols are in place to protect students and researchers from abuse.



(Click picture to watch Rep. Hultgren's Q and A with witnesses)

The majority of my STEM Scholars class are young women, which is a great sign of progress in getting women involved in STEM education and careers. Unfortunately, young women lead these fields at younger ages and then tend to fall off as they get older. I asked: "We know that only 23 percent of women with STEM degrees stay in STEM fields. What impact do you think harassment and discrimination play in women leaving the STEM fields?"

As reported in The New Republic: "Unfortunately, I think it explains most of it," replied Kate Clancy, an anthropologist at the University of Illinois who studies workplaces in the sciences. "It's the daily indignity of being told that you are less than." Kristina Larsen, an attorney who often represents women in science, chimed in: "I've never met a woman who said she left science because it just wasn't for her."

"Then we are losing the very best and brightest," Hultgren said. "We really do want to help. We need you. We need your brilliance and expertise. This has to stop."

### Supporting Research at Federal Facilities

As we encounter concerning revelations about misconduct happening among scientific researchers, we also acknowledge the great work being done at our federal facilities. In case you missed

it, the House passed my legislation, the **Accelerating American Leadership in Science Act, H.R. 4377**, which authorizes worldclass scientific research at Fermilab in Batavia, Argonne in Lemont
and Oak Ridge National Laboratory in Tennessee. My bill ensures
America remains the destination for the world's top researchers to
explore the outer reaches of our scientific knowledge.

Click here to learn more about H.R. 4377.

## Bill Nye and the Planetary Science Caucus



(Rep. Hultgren with Bill Nye, CEO of the Planetary Society)

One of the highlights surrounding the State of the Union Address was sitting down with Bill Nye, The Science Guy, to talk about what Congress can do to help encourage and propel scientific research and exploration to the outer reaches of space. Click <a href="here to read">here to read</a> about our meeting.

I have joined the new Planetary Science Congressional Caucus, and appeared on the Planetary Radio podcast with Rep. Derek Kilmer (D-WA) to talk about why we need to continue to explore the

outer reaches of our universe. Click <u>here to listen to our conversation</u>.

In Your Service,

Randy Hultgren Member of Congress 14th District, Illinois



Washington, DC Office 2455 Rayburn HOB Washington, DC 20515 Phone: 202-225-2976 Fax: 202-225-0697 McHenry Office 1500 State Route 31 McHenry, IL 60050 Phone: 815-679-6352 Fax: 815-679-6551

Unsubscribe | Privacy Policy

Campton Hills Office 40W310 Lafox Road, Suite F2 Campton Hills, IL 60175 Phone: 630-584-2734

Fax: 630-584-2746